ATTACHMENT 1

BROADBAND ACCESS COALITION

PROPOSAL TO UPDATE THE INTERNATIONAL BUREAU FILING SYSTEM

January 24, 2018

The Broadband Access Coalition ("BAC" or "Coalition") hereby submits this proposal in the above-captioned Petition for Rulemaking ("Petition") and Notice of Inquiry ("*Mid-Band NOI*") proceedings to address the urgent need for the Commission to improve the International Bureau Filing System ("IBFS") database so that it contains up-to-date, accurate and targeted data regarding the operation of earth stations receiving in the 3700 – 4200 MHz ("4 GHz") band.[1] BAC sets forth below, in detail, the specific information the Commission needs to collect and a recommended process for collecting that information.

The BAC urges the Commission to expeditiously issue a Public Notice to collect the information outlined below.

I. Background

In the *Mid-Band NOI*, the Commission sought comment on how it could "promote flexible use, stimulate investment, and encourage deployment" in the 4 GHz Band.[2] The extensive record in the proceeding demonstrates a high level of interest in more intensive use of the 4 GHz band for terrestrial fixed services. Many commenters, including the BAC, asked the Commission to authorize the deployment of high-throughput, licensed, point-to-multipoint ("P2MP") fixed wireless broadband services in the 4 GHz band to facilitate the rapid deployment of much-needed gigabit and near-gigabit fixed broadband service to consumers, businesses and anchor institutions in rural and other underserved areas. Proponents of P2MP emphasized that they could share the 4 GHz band without disrupting incumbent Fixed-Satellite Service ("FSS") operators, using existing Part 101 frequency coordination procedures. Other commenters asked the Commission to authorize use of the 4 GHz band on a shared basis for fixed and mobile service. Some commenters asked the Commission to authorize use of the 4 GHz band for the deployment of 5G mobile services by relocating some or all FSS users or by reducing the amount of spectrum used by FSS users.

The Comments and Reply Comments make clear that the data currently available regarding FSS operations in the 4 GHz band is badly flawed and incomplete. Advocates of introducing new terrestrial services into the 4 GHz band pointed out that many of the registered earth stations no longer exist, and therefore the FCC database overstates the number of earth stations that must be protected. FSS interests asserted that there are many unregistered earth

[1] *Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, Notice of Inquiry, GN Docket No. 17-183, FCC 17-104 (rel. Aug. 3, 2017). Comments were filed on or before October 2, 2017 and Reply Comments were filed on or before November 15, 2017 in GN Docket No. 17-183.

[2] *Id.* at ¶ 12.

stations, and therefore the FCC database understates the number of earth stations.[3] And even aside from uncertainty concerning the number of operating earth stations, there is no data on what frequencies are actually in use. While FSS incumbents and advocates of introducing new terrestrial services may continue to disagree about the continued need for "full-band, full-arc" frequency coordination protection, an accurate accounting of the portion of the band actually being used by each earth station is essential to a well-informed rulemaking.

II. The Commission Should Move Immediately To Update And Improve The IBFS Database For Earth Stations Operating In The 4 GHz Band

Commenters on all sides of the issue agree broadly that the IBFS database needs to be updated. No commenter opposed updating the IBFS database. The BAC sets forth below, in detail, the specific information the Commission needs to collect and a recommended process for collecting that information. The goal of the IBFS database update is to make available to the public accurate, up-to-date, and targeted information about earth stations currently operating in the 4 GHz band.[4] All of the steps outlined below can be accomplished through adoption of a single Public Notice. Respondents should be given three (3) months from the date of the Public Notice to provide the requested information.

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[3] Several FSS interests repeatedly claim that "tens of thousands" of earth stations could be impacted, and that there may be as many as 33,000 operational receive-only earth stations. *See e.g.* Reply Comments of Satellite Industry Association ("SIA") at i, ii, 16; Reply Comments of SES Americom, Inc. ("SES") at 10. BAC submits that this claim is highly exaggerated and based on faulty math – and that the update of the IBFS database will demonstrate this. The faulty math is based on the estimate of the American Cable Association ("ACA") that "as many as 90% of its members' roughly 3000 currently operational receive-only earth stations are unregistered." ACA Comments at n. 4. SIA and SES then apply this estimate to the total number of licensed or registered earth stations currently operating in the 4 GHz band – which is about 3300. (There are about 4700 registered earth stations in IBFS; of these, at least 1400 no longer exist, leaving 3300 registered and operating earth stations operating in the 4 GHz band.) Applying the ACA estimate to the entire universe of receive-only earth stations requires a huge – and mistaken -- leap of faith. It is likely that the largest number of unregistered earth stations belong to the smallest rural cable head-end operators, radio stations, and TV stations. By contrast, large cable operators (Comcast, Charter), large radio and TV/radio network and station group operators do register their earth stations. NPR and AP also register their earth stations.

[4] The Public Notice issued by the International Bureau on November 21, 2017 is a small step in the right direction, but wholly inadequate to obtain the comprehensive information required by the Commission and interested parties. *See International Bureau Addresses Accuracy of Earth Station Location Information in IBFS*, Report No. SPB-272, DA 17-1127, rel. Nov. 21, 2017 ("IB Public Notice"). The IB Public Notice simply reminded earth station operators to timely file for license renewals, to maintain accurate information, including geographic coordinates, and to notify the Commission when an earth station is no longer in service. The Coalition seeks a Public Notice that *requires* earth station registrants to refresh the database by confirming or correcting the geographic coordinates and by surrendering earth stations no longer in use. Further, the proposed Public Notice would require earth station operators to submit information regarding the actual frequencies in use and the orbital slots being accessed.

This update will provide invaluable information to the Commission, and to the parties to these proceedings, regarding the actual number and location of operating earth stations receiving in the 4 GHz band, the frequencies actually and actively being used by these earth stations, and the orbital slots actually being accessed. Updating the IBFS database will enable the Commission and interested parties to make a much better and more accurate assessment of the opportunities for sharing (or relocation), and thus guide the Commission to the best manner to maximize use of the 4 GHz band while protecting incumbent operations.

A. Summary Of Information To Be Collected

Specifically, the Commission should release a Public Notice seeking the following data for earth stations receiving in the 4 GHz band:

- Verification of the continued operation of licensed or registered earth stations
- Verification of geographic coordinates of licensed or registered earth stations
- Registration of previously unregistered earth stations that are in operation
- The actual frequencies actively being used
- The actual orbital location(s) actively being accessed
- Yes/no response as to whether the earth station is connected to via a Point of Presence ("PoP") to a high-capacity fiber link
- Surrender and cancellation of licensed or registered earth stations that were not built or are no longer operating.

B. Identify All Currently Operating Earth Stations Receiving In The 4 GHz Band And Their Key Operating Parameters

The Coalition proposes that the Public Notice require all of the following information to be submitted:

Registrants and licensees ("Registrants") must verify the continued operation of licensed or registered earth stations operating in the 4 GHz band

In order to be entitled to interference protection, all Registrants must verify the current active operation of earth stations operating in the 4 GHz band. This is a very simple requirement, but absolutely essential to the Commission's review of current FSS operations in the 4 GHz band.

Registrants must update the IBFS database by confirming or correcting the geographic coordinates for each earth station registration or license that is currently in use

Registrants must confirm that that the geographic coordinates specified in the database for all registered or licensed earth stations operating in the 4 GHz band are correct. If the coordinates in IBFS are incorrect, the Registrant must provide corrected coordinates, and indicate that it is doing so.[5]

Receive-only earth stations seeking interference protection must register

The Commission's Rules are quite clear that receive-only earth stations that do not register with the Commission are not entitled to interference protection.[6] Several FSS commenters have asserted that certain operators of 4 GHz band receive-only earth stations have not previously registered because the cost outweighed the benefit, given the limited use of the band by terrestrial microwave operations.[7] The Commission is now considering proposals to expand use of the band by terrestrial fixed and mobile operations. It is, of course, impossible for potential new users to protect an unknown incumbent user. As a result, it is now imperative that all receive-only earth stations seeking interference protection must register by a date certain. Further, any receive-only earth station that seeks to register must also provide the key operating parameters specified below.

Registrants must update the IBFS database by providing key operating parameters

Registrants must be required to provide the actual operating frequencies actively used by each earth station as of a specified date, which could be the date of the Public Notice.[8] This information should generally correspond to the specific transponder(s) being used by that earth station. Registrants should be advised that specifying the full 3700 – 4200 MHz band is unacceptable and non-responsive unless the Registrant is actually using the earth station to actively downlink from transponders that cover the full 500 megahertz band as of the date of the

[5] *See* 47 C.F.R. § 1.17. The Coalition has no objection to SIA's proposal that the Commission offer "amnesty" to earth station operators that provide corrected information on a timely basis in the manner specified by the Commission.

[6] 47 C.F.R. § 25.131(b).

[7] *See, e.g.*, Comments of SIA at 18 - 19, 22 – 24; Comments of American Cable Association at 4 n.4; Comments of National Association of Broadcasters at 3 – 4.

[8] The goal is to obtain a "snapshot" of the actual frequencies being used at each FSS earth station. The NPRM can address the obligations of FSS earth station registrants to update this information.

report. This frequency information is critical to making a determination of the amount of spectrum in the 4 GHz band that may be available for sharing in any given geographic area.[9]

Registrants should also be permitted to voluntarily specify whether any of their earth stations have used other operating frequencies in the past 10 years, and if so, the actual operating frequencies that were used by each earth station, and the time period when those frequency bands were used. A number of FSS operators have asserted that "full-band, full-arc" frequency protection is necessary, because the operators must have access to other frequency bands in certain circumstances, including satellite or transponder outages. In order for the Commission to make a full and reasoned assessment of the need for "full-band" frequency protection, FSS operators should be permitted to provide relevant data regarding previous changes in the frequencies they have used within the 500 megahertz in the 4 GHz Band.

Registrants must also be required to specify the actual orbital slot(s) actively being accessed, and the azimuth and elevation angle, for each earth station. Registrants should also be permitted voluntarily to specify any other orbital slots used in the past 10 years. This information would be very helpful for the Commission to make a full and reasoned assessment of the need for "full-arc" frequency coordination.

Registrants should voluntarily be able to specify whether an earth station is connected via a PoP to a high-capacity fiber optic link

The vast majority of earth stations operating in the 4 GHz band are used to downlink programming, and are not connected via a PoP to high-capacity fiber links. However, some earth stations operating at hub, gateway or teleport facilities may be connected to high-capacity fiber links for the exchange of traffic[10] Operators should voluntarily be permitted to specify whether any of their earth stations is connected via a PoP to such links. The Commission and interested parties may find this information to be useful.

Registrants must surrender for cancellation any earth station registration or license that is no longer being used

Section 25.133(d) requires that:

> Each receiving earth station licensed or registered pursuant to §25.131 must be constructed and placed into service within 6 months after coordination has been

[9] For example, NPR earth stations use one 23 megahertz channel at approximately 3748 – 3771 MHz on the Intelsat 34 satellite and one 23 megahertz channel at approximately 3875 – 3898 MHz on the SES-2 satellite. *See* BAC Petition for Rulemaking, RM-11791, filed June 21, 2017 at 22 and n. 42.

[10] To be clear, a cable head-end that is connected to the cable systems' fiber optic distribution system would not be considered to be connected via a PoP to a fiber optic link for the exchange of traffic.

> completed. Each licensee or registrant must file with the Commission a certification that the facility is operating ….[11]

In order for a Registrant to comply with long-standing Commission policy that requires accurate representations, it follows that if a Registrant is no longer operating the facility, the certification will no longer be accurate, and the Registrant must surrender its registration or license.

III. The Commission Has Required Licensees To Provide Similar Information In Other Proceedings

Most recently, the Commission required all FSS earth stations operating in the 3550 – 3650 MHz band and the 3650 – 3700 MHz band, as well as telemetry, tracking and control earth stations operating in the 3700 – 4200 MHz band, to register with the FCC, and provide geographic and technical information in order to receive interference protection from Citizens Broadband Radio Service ("CBRS") users.[12]

The Commission has required other Title III licensees to provide similar information. For example, the Wireless Telecommunication Bureau ("WTB") sent more than 267,000 audit letters involving approximately 420,000 call signs to Private Land Mobile Radio Service ("PLMRS") licensees beginning in August 2001.[13] The purpose of the PLMRS audit was to determine whether licensees had complied with Part 90 rules requiring automatic cancellation of licenses where the licensee did not complete construction within a specified time or the station did not remain operational.[14] As a result of the audit, the Commission cancelled 37,448 licenses.[15]

Similarly, in 2002, the WTB sought to verify data regarding the Multipoint Distribution Service ("MDS"), Multichannel Multipoint Distribution Service ("MMDS"), and the Instructional Television Fixed Service ("ITFS").[16]

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[11] 47 C.F.R. § 25.133(d); *see also* 47 C.F.R. § 1.17 (Truthful and Accurate Statements to the Commission).

[12] *See Wireless Telecommunications Bureau, Office of Engineering and Technology, and International Bureau Announce Procedures for Registration of Fixed Satellite Service Earth Stations Entitled to Protection from the 3.5 GHz Citizens Broadband Radio Service*, Public Notice, DA 17-1232, rel. Dec. 21, 2017 ("CBRS Public Notice").

[13] *See Wireless Telecommunications Bureau Announces Final Phase of the Private Land Mobile Radio Station Construction and Operational Status Audit*, Public Notice, DA 04-289, rel. Feb. 9, 2004.

[14] *See* 47 C.F.R. §§ 90.155 and 90.157.

[15] *See* http://wireless.fcc.gov/licensing/index.htm?job=audit_home&id=plmrs, last visited January 10, 2018.

[16] *See Wireless Telecommunications Bureau Seeks to Verify ITFS, MDS and MMDS License Status and Pending Applications*, Public Notice, DA 02-2751, rel. Oct. 18, 2002.

> In so doing, WTB seeks to ensure that all information contained within the [database] is accurate, current and comprehensive. In order to facilitate this process, WTB is requesting that all ITFS, MDS and MMDS licensees and applicants review and verify important licensing information ….

As part of the process, licensees were required to verify certain technical information.[17]

IV. Conclusion

For the reasons set forth herein, the Broadband Access Coalition urges the Commission to expeditiously issue a Public Notice to collect the information outlined above.

Respectfully submitted,

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[17] *Id.* at 2.